

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No. : 10/560,609  
Applicant : Eugene et al.  
Filing date : March 27, 2006  
Title : Polyurethane resin for color inks  
TC/A.U. : 1796  
Examiner : GILLESPIE  
Docket No. : 5779  
Customer No. : 26936

**DECLARATION OF GILLES EISELE**

I, Gilles Eisele, French citizen, do hereby declare:

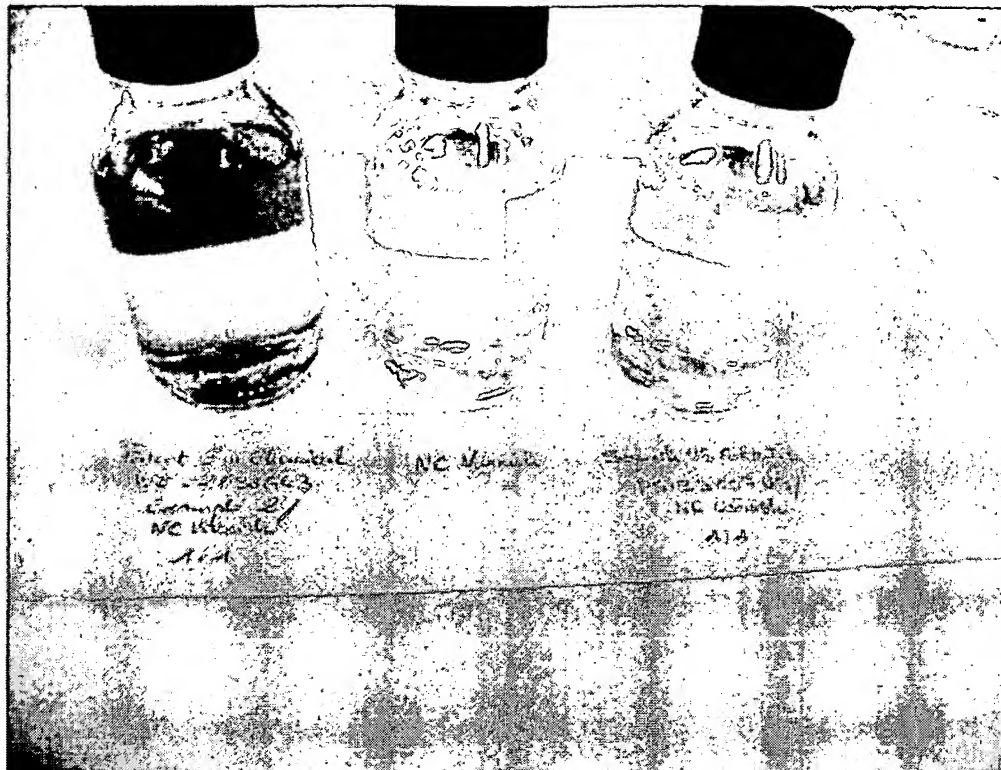
I am co-inventor of the patent application 10/560,609. I am a chemist, engineer from the High School of Chemistry from Mulhouse. I am graduated (PhD) in Chemistry and Photochemistry from the University of Haute-Alsace (France). I have been working in the filed of printing inks for 11 years as R&D Manager for Polymer synthesis. Therefore, I consider myself an expert in this field.

I have reproduced example 2 from WO 02/38643 A2 (Arcurio et al.), as it is described on p. 16, l. 25, to p. 18, l. 3, of said reference.

Moreover, I have reproduced example 1 of the present application as disclosed therein.

I have combined these two polyurethane resins with a nitrocellulose base in a ratio of polyurethane resin to nitrocellulose of 1:1.

The result of these experiments is shown in the below photography:




In the middle, the pure nitrocellulose composition is shown: It is colorless.

On the right hand side, the 1:1 mixture of the polyurethane resin of example 1 of the present application and said nitrocellulose composition is shown (designated as "Siegwerk US color ink; PSIEG00705/NC Varnish 1/1"). As can be seen, also this mixture is colorless, i.e. no yellowing of the nitrocellulose has occurred upon addition of the polyurethane resin according to the present invention.

On the left hand side, the 1:1 mixture of the polyurethane resin of example 2 of WO 02/38643 A2 (Arcurio et al.) and said nitrocellulose composition is shown (designated as "Patent Sun Chemical, WO 02/38643 Example 2/NC Varnish 1/1"). As can be seen, here a yellowing of the mixture has occurred, due to the reaction of amino groups of the amino-terminated polyurethane resin of WO 02/38643 with the nitrocellulose.

I would therefore conclude that the polyurethane resins described in WO 02/38643 are not suitable in color inks comprising nitrocellulose as a carrier for pigments.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that the making of willful false statements or the like is punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Annemasse.....*Thursday, 24 April 2008*.....

Gilles Eisele